# GOVERNMENT OF INDIA
# HOUSING AND URBAN POVERTY ALLEVIATION
# LOK SABHA

UNSTARRED QUESTION NO:1229
ANSWERED ON:23.11.2016
Real Estate
Kumar Shri P.

**Will the Minister of HOUSING AND URBAN POVERTY ALLEVIATION be pleased to state:**

Will the Minister of HOUSING AND URBAN POVERTY ALLEVIATION be pleased to state:

(a) whether the Government is facing shortage of trained and skilled manpower in the construction industry;

(b) if so, the details thereof and the corrective measures taken by the Government in this regard;

(c) whether measures have been taken by the Government to promote Research and Development in the construction industry;

(d) if so, the details thereof and if not, the reasons therefor; and

(e) whether the Government plans to introduce policy measures to support mass housing construction technologies and if so, the details thereof and the timeline for the same?

## Answer

THE MINISTER OF STATE IN THE MINISTRY OF HOUSING & URBAN POVERTY ALLEVIATION

(RAO INDERJIT SINGH)

(a) & (b): In order to understand the sectoral and geographical spread of skill requirement/gaps and incremental human resource requirement across the sectors, studies have been undertaken by the Government through National Skill Development Corporation (NSDC), a Public Private Partnership (PPP) entity. As per the study report, the incremental human resource requirement in the Building Construction and Real Estate sector for the period 2013-2022 is 31.1 million. As an effort to align the skill development initiatives with the incremental human resource requirement, Pradhan Mantri Kaushal Vikas Yojna (PMKVY) has been launched by Ministry of Skill Development and Entrepreneurship. Many other Ministries are also

Implementing Schemes to provide skill training in various sectors. Ministry of Housing and Urban Poverty Alleviation is implementing Deendayal Antyodaya National Urban Livelihoods Mission (DAY-NULM) to provide skill training to urban poor.

(c) & (d): Under Council for Scientific and Industrial Research (CSIR) two premier Institutions namely, Central Building Research Institute (CBRI) and Structural Engineering Research Centre (SERC) and other institutions in Bhopal, Trivandrum, Bhubaneswar and Jorhat have been doing Research & Development (R&D) work to develop new innovative, cost effective, environment-friendly building materials and construction technologies. Over the years a number of innovative building materials and technologies have been developed and are being used in construction. Some of the important ones are flyash based building components, wood substitutes, plank & joists system for roofing, Prefabricated Brick Panels for floor and roof, geo-polymer concrete, various alternatives for doors & windows, etc.

Besides this Indian Institute of Technology (IITs), National Institute of Technology (NITs) and other technical institutions are also engaged in R&D work especially on emerging technologies like Glass Fibre Gypsum Panel System (IIT Madras), EPS Core Panel System (IIT Roorkee), bamboo based technology (IIT Delhi & IIT Kharagpur). Also other Government departments such as Department of Science & Technology, lends financial support to IITs and NITs to carry out R&D in the construction sector.

(e): 'Land' and 'Housing' are State subjects. In Pradhan Mantri Awas Yojana (Urban) - Housing for All (urban) Mission (2015-2022), Government of India has set up a Technology Sub-Mission to facilitate adoption of modern, innovative and green technologies and building material for faster and quality construction of houses. Technology Sub-Mission also facilitates preparation and adoption of layout designs and building plans suitable for various geo-climatic zones. It also assists States/Cities in deploying disaster resistant and environment friendly technologies.

Building Materials & Technology Promotion Council (BMTPC) under Ministry of Housing & Urban Poverty Alleviation has identified evaluated and recommended a number of technologies for mass scale housing. Central Public Works Department (CPWD) has issued Schedule of Rates on three of the technologies namely light gauge steel structures, EPS based construction system & Monolithic Concrete Construction.

Also, Ministry of Housing & Urban Poverty Alleviation has also brought out the following documents which would be helpful for State Governments to adopt new construction technologies for mass housing.
i) Compendium of Prospective Emerging Technologies for Mass Housing

ii) Model Expression of Interest for Empanelment of Agencies for construction of Houses/Buildings using Alternate Technologies on Design and Built Basis.
iii) Multi-Attribute Evaluation Methodology for selection of Emerging Housing Technologies

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